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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,375	09/10/2003	Willie Chionh	3380-0195P	3323
2292	7590	11/18/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			DRODGE, JOSEPH W	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/658,375

Applicant(s)

CHIONH ET AL.

Examiner

Joseph W. Drodge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

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The disclosure is objected to because of the following informalities: At page 1, it is unclear whether figure 4 is introduced as constituting prior art.

Appropriate correction is required.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is unclear as to what component the ozone water device is connected in parallel with.

At the end of claim 3, it is unclear whether applicant is claiming the inclines of the pores or the baffles, or both, being inclined in different directions.

In claims 4 and 5, "the machine" lacks antecedent basis and nexus/clear structural relationship with respect to remainder of the device components; does "the machine" refer to a part of the ozone water device or to a part of the water supply system? .

Additionally in claim 5, it is unclear whether the ozone and anion generator is positively recited as a part of the ozone device introduced in independent claim 1.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Porter patent 5,897,832. Porter discloses a dialyzer reprocessing device that comprises

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purified water supply system (source 40 with conduits 38,44 and 64) and an ozone water device (56/52/48/42) that is connected to an input end at 42 of the water supply system, in parallel with conduit 38 delivering purified water from the source. The water supply system comprises a pump 48 to increase the pressure to a relatively higher values. Recitation of the water being "RO water" and of "chemical solutions" have little patentable weight, since there is no equivalent structure.

For claim 2, the Porter ozone device comprises ozone generator 52, venturi injector mixer 48, storage tank 34, ozone concentration sensor 66, and valve 46 or 36, see details of figure 5.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Porter in view of one of Schneider et al patent 5,493,743 or Coke patent 5,145,585, plus one or both of Walker patent 2,391,110 and Ditzler et al patent 5,215,375. Claim 3 differs from Porter in requiring the ozone device mixer to comprise a static mixer or barrel, with plurality of baffles having inclined pores, the baffles or pores being alternately arranged in different directions.

Coke teaches injecting ozone for sterilizing into a water supply system and comprising a static mixer with a tubular housing or barrel and having a plurality of baffles (especially column 5, lines 10-17) and Schneider et al similarly teaches such static mixer at column 6, lines 10-16.

Ditzler et al teaches mixing gases and liquid using baffles with pores, with the baffles and their pores being inclined in alternately different directions (Abstract and figure 1), while Walker teaches a mixing device of general utility having a static mixer with a barrel/housing 11 having baffle plates 49-52 and their included angled pores 53 both being inclined in alternate directions (embodiment of figure 5 and page 2, column 1, lines 53-68).

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It would have been obvious to one of ordinary skill in the art to have incorporated a static mixer with baffles that have pores with baffles and/or pores being inclined in alternating directions, into the Porter system, as taught by Coke or Schneider et al in combination with one or both of Ditzler et al or Walker, in order to more thoroughly entrain or disperse the ozone throughout the entire flow volume of sterilizing water of Porter.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porter in view of Ho PB PUBS Document US2002/0179518, published 12/05/2002. Claims 4 and 5 differ in requiring one of the device components or machine, such as the Porter chamber to have a vent hole and ventilator for exhausting residual ozone, claim 5 also requiring such ventilator to be coupled with an anion generator. Ho teaches all such features including anode/cathode generator (paragraph 15 referring to anode 61 and cathode 62) coupled as shown in figures 1 and 2 to vent hole from machine ventilator 63 and to a release valve 64 through a vent hole and air conduit (especially paragraph 16). It would have been also obvious to one of ordinary skill in the art to have augmented the Porter system with the machine of Ho, in order to release excess gas including hydrogen generated with the ozone (for safety purposes).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Twardowski patent 5,902,476 also teaches ozone sterilization of water used for cleaning and reprocessing dialyzers.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached at 571-272-1151. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

November 10, 2005

  
JOSEPH DRODGE  
PRIMARY EXAMINER